

**REMARKS****A. Status of the Claims**

Claims 40-89 are currently pending in this application. Claims 1-39 and 90-137 have been previously cancelled. In this response, Applicants have requested the cancellation of claim 85 and have added new claims 138 and 139. When this amendment has been entered, the claims under examination will be claims 40, 86-89, and 138-139. Claims 41-84 are currently withdrawn.

Claims 40 and 85 are rejected under 35 U.S.C. § 103(a) for allegedly being unpatentable over U.S. Patent No. 6,680,301 to Berg (“Berg”).

The Examiner objects to claims 86-89 for being dependent on a rejected claim, but has indicated that these claims would be allowable if rewritten in independent form incorporating all the limitations of the claim(s) from which they depend. In this response, Applicants have not rewritten claims 86-89 in the manner suggested by the Examiner, because Applicants maintain that claim 40, the independent claim from which claims 86-89 now depend, is itself allowable, for the reasons set forth below. Nonetheless, Applicants hereby reserve the right to rewrite claims 86-89 in independent claim format as suggested by the Examiner, if it is deemed necessary during a later stage of the prosecution.

**B. Explanation of the Amendments**

Independent claim 40 has been amended to recite, *inter alia*, a “positively charged backbone” that is “covalently attached to a plurality of amino acid sequences, wherein said amino acid sequences are selected from the group consisting of (gly)<sub>p</sub>-RGRDDRRQRRR-(gly)<sub>q</sub> (SEQ ID NO:19) and (gly)<sub>p</sub>-YGRKKRRQRRR-(gly)<sub>q</sub> (SEQ ID NO: 20)”. Support for these

amendments is found throughout the specification [e.g., see original specification, page 9, lines 5-15].

Moreover, claim 85 has been cancelled, and elements of claim 85 have been incorporated into claim 40.

Applicants have added new claims 138 and 139. Support for these new claims is found throughout the specification [e.g., see specification, page 16, line 14]. No new matter has been added by the presentation of these new claims.

### C. Applicants' Claims Are Patentable Over Berg

Applicants respectfully traverse the rejection of claim 40 under 35 U.S.C. § 103(a) for allegedly being unpatentable over Berg. Briefly, Berg does not teach or suggest all of the claim elements of this claim. Accordingly, the rejection of these claims over Berg should be withdrawn. MPEP § 2143.03.

According to the Examiner, Berg discloses compositions that contain a polycation (e.g., polylysine) complexed to a nucleic acid, wherein the nucleic acid itself is conjugated to a photoactivating compound [Office Action, bridging paragraph between pages 3 and 4]. The Examiner contends that the photoactivating compound may be considered as a “targeting agent”, a “therapeutic agent”, or a “cosmeceutical agent” [Office Action, page 4]. While the Examiner concedes that Berg does not describe the number of photoactivating agents that could be attached to the nucleic acid, the Examiner contends that the number of photoactivating agents is considered to be a results-effective variable that easily could have been optimized by one of ordinary skill in the art at the time of the instant invention.

However, Berg does not teach or suggest any composition that contains “a positively charged backbone covalently attached to a plurality of amino acid sequences, wherein said amino acid sequences are selected from the group consisting of (gly)<sub>p</sub>-RGRDDRRQRRR-(gly)<sub>q</sub>...and (gly)<sub>p</sub>-YGRKKRRQRRR-(gly)<sub>q</sub>” as recited in Applicants’ amended claim 40. At best, Berg merely states that the compositions may contain polylysine, polyarginine, or polyethyleneimine, as noted by the Examiner on page 3 of the October 3, 2007 Office Action. However, even if one were to argue that polylysine, polyarginine, and polyethyleneimine are “positively charged backbones”, they are not “covalently attached to a plurality of amino acid sequences” as recited in claim 40.

Because Berg fails to teach or disclose all of the elements of claim 40, Applicants respectfully assert that the rejection of this claim under 35 U.S.C. § 103(a) should be withdrawn. See MPEP § 2143.

#### D. Examination of Additional Species

The Examiner has confirmed that the species initially elected by Applicants for prosecution is “free of the art” [Office Action, page 2]. The elected species comprises a positively charged backbone polymer having an amino acid sequence of the formula (gly)<sub>p</sub>-RGRDDRRQRRR-(gly)<sub>q</sub> (SEQ ID NO.: 19), a negatively charged backbone comprising a plurality of attached targeting moieties, and a negatively charged backbone having a plurality of attached botulinum toxin molecules.

In this response, Applicants have amended generic claim 40 to recite a Markush group that includes two species: an amino acid sequence described by SEQ ID NO. 19, and a second amino acid sequence described by SEQ ID NO.: 20. Even with these amendments, claim

40 is still generic to the elected species and are believed to be patentable for the reasons set forth above. Accordingly, Applicants respectfully assert that they are now entitled to consideration of claims to additional species, pursuant to 37 C.F.R. § 1.141. Therefore, Applicants respectfully request the examination of withdrawn claims 41-84.

**CONCLUSION**

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and allowance of this application.

**AUTHORIZATION**

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. **50-3732**, Order No. 13720-105065US1. In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. **50-3732**, Order No. 13720-105065US1.

Respectfully submitted,  
KING & SPALDING, L.L.P.

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By: /Joseph D. Eng Jr./  
Joseph D. Eng Jr. / Kenneth H. Sonnenfeld  
Registration No. 54,084 / 33,285

**Correspondence Address:**

KING & SPALDING, L.L.P.  
1185 Avenue of the Americas  
New York, NY, 10036-4003  
(212) 556 - 2100 Telephone  
(212) 556 - 2222 Facsimile